

Title (en)
METHOD AND DEVICE FOR SENSING OF OBSTACLES FOR AN AUTONOMOUS DEVICE

Title (de)
VERFAHREN UND GERÄT ZUR HINDERNISERKENNUNG FÜR AUTONOMES GERÄT

Title (fr)
PROCEDE ET DISPOSITIF DE DETECTION D'OBSTACLES POUR APPAREIL AUTONOME

Publication
EP 0753160 A1 19970115 (EN)

Application
EP 95914657 A 19950328

Priority
• SE 9500330 W 19950328
• SE 9401061 A 19940329

Abstract (en)
[origin: WO9526512A1] The present invention provides a method and a system for proximate field orientation of an autonomous device and utilizes a transmitted wave having a first frequency of slow propagation, whereby reflections from obstacles within a proximate area are detected. According to the present invention receiving means are arranged in a slanted plane or preferably along a curved base-line to, in a simple way, obtain a three-dimensional direction to an obstacle reflecting the frequency of slow propagation. Additionally is arranged above at least one receiving means an absorber or a screen or a combination thereof, whereby that acts as an "eyebrow" attenuating undesired reflections which at the receiving means come from overhead. Additionally at least one of the receiving means along the generally curved base-line is arranged differently in height in relation to the remaining receivers and preferably the most outer receiver means on each side in the line of receivers along the generally curved base-line are arranged differently in height in relation to the remaining receiving means for an improvement of the three-dimensional resolution.

IPC 1-7
G01S 15/93; **G01S 7/54**

IPC 8 full level
G01S 15/931 (2020.01); **A47L 11/40** (2006.01); **G01S 7/54** (2006.01); **G01S 15/74** (2006.01); **G01S 15/89** (2006.01); **G05D 1/02** (2006.01); **G01S 15/02** (2006.01); **G01S 15/06** (2006.01); **G01S 15/10** (2006.01); **G01S 15/86** (2020.01)

CPC (source: EP US)
A47L 11/4011 (2013.01 - EP US); **A47L 11/4061** (2013.01 - EP US); **G01S 7/54** (2013.01 - EP US); **G01S 15/74** (2013.01 - EP US); **G01S 15/874** (2013.01 - EP US); **G01S 15/89** (2013.01 - EP US); **G01S 15/931** (2013.01 - EP US); **G05D 1/0221** (2024.01 - US); **G05D 1/0227** (2024.01 - EP US); **G05D 1/0234** (2024.01 - EP US); **G05D 1/0246** (2024.01 - EP US); **G05D 1/0255** (2024.01 - EP US); **A47L 2201/04** (2013.01 - EP US); **G01S 15/06** (2013.01 - EP US); **G01S 15/104** (2013.01 - EP US); **G01S 15/86** (2020.01 - EP US); **G01S 2015/938** (2013.01 - EP US); **G05D 1/0221** (2024.01 - EP)

Cited by
DE102004014281B4; EP4285800A1; DE102004014281A1; EP3027101A4; US11406235B2; US10265858B2; US11202542B2; US11839346B2; DE102008009208A1; EP2260690A2; DE102016125199A1; DE102016125199B4

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
WO 9526512 A1 19951005; AU 2155495 A 19951017; AU 689571 B2 19980402; CA 2186223 A1 19951005; DE 69520736 D1 20010523; DE 69520736 T2 20011122; EP 0753160 A1 19970115; EP 0753160 B1 20010418; ES 2156940 T3 20010801; JP 3480576 B2 20031222; JP H09511060 A 19971104; SE 502834 C2 19960129; SE 9401061 D0 19940329; SE 9401061 L 19950930; US 5867800 A 19990202

DOCDB simple family (application)
SE 9500330 W 19950328; AU 2155495 A 19950328; CA 2186223 A 19950328; DE 69520736 T 19950328; EP 95914657 A 19950328; ES 95914657 T 19950328; JP 52512795 A 19950328; SE 9401061 A 19940329; US 71839996 A 19960930